3. Bianca

Program Name: Bianca.java Input File: bianca.dat

Your friend Bianca has Geometry homework due next period, and she forgot all about it! Quickly write a program to solve Pythagoras theorem before the homework is due.

Use the following theorem (you are given a and b, so solve for c):

$$A^2 + B^2 = C^2$$

Input: The first line will contain a single integer n (0 < n < 100) that indicates the number of data sets that follow. Each data set will consist of two integers A and B (0 < A, B < 1000), separated by a space, denoting the values A and B in the equation above.

Output: Output the value of C (0 < C < 1000000) given the A and B values from the input, rounded to 2 decimal places, as shown below.

Sample input:

4

3 4

12 14

5 12

5 8

Sample output:

5.00

18.44

13.00

9.43